



CONTACT US

Mobile / Whatsapp : +86 19966157838

E-mail : info@yangziindustry.com



Model 06 Counterbalanced forklift

Usage and Maintenance Instructions



Warning

You must read the operating instructions in this manual before use.



Notice

- . Please check the last page of this document and the nameplate for all current product type markings.
- . Keep the item safe for further use.

Foreword

Before operating this electric stacker, please read this operation manual carefully and ensure you fully understand how to use the vehicle properly. Improper operation may lead to dangers.

This manual describes how to use different types of electric stackers. Please ensure that the stacker you are operating or repairing matches the model of what you are using. Please keep this manual in a safe place for future reference. If this manual or any warning/caution labels are damaged or lost, please contact local dealer for replacements. This stacker complies with EN ISO 3691-1 (Industrial trucks — Safety requirements and verification — Part 1), EN 12895 (Industrial trucks — Electromagnetic compatibility), EN 12053 (Industrial truck safety — Test methods for measuring noise emissions), and EN 1175-1 (Industrial truck safety — Electrical requirements), assuming the truck is used for its intended purpose.

Note:

- . Hazardous waste harmful to the environment, such as waste batteries, waste oil, and electronic products, will negatively impact the ecological environment or human health if not handled properly.
- . Waste packaging should be sorted by material and placed in solid waste bins for collection and disposal by local specialized environmental agencies. To avoid pollution, littering is strictly prohibited.
- . To prevent oil leakage during product usage, users should prepare absorbent materials (such as sawdust or dry rags) to promptly soak up any spilled oil. To avoid secondary pollution, used absorbent materials must be handed over to specialized departments in accordance with local regulations.
- . Products are improved continuously. As this manual is intended solely for the purpose of operating/maintaining the stacker, it does not guarantee specific features. Thank you for your understanding.

Attention:

In this manual, symbol on the left indicate warnings and hazardous situations which, if not followed, may result in death or serious injury.

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1. Proper Use

Users are not allowed to operate the stacker without reading this operation manual.

- 1.The electric stacker described in this manual is a pedestrian-operated electric stacker equipped with electrically operated controls for lifting height adjustment. This stacker is designed for lifting, lowering, and transporting palletized loads to the desired lifting height.
- 2.Improper use may result in personal injury or machine damage.
- 3.The operator/operating company must ensure correct usage and ensure that the stacker is operated only by trained and authorized personnels.
- 4.This stacker must be used on firm, level, sound surfaces and suitable ground. The truck is intended for indoor use and light-load applications at an ambient temperature ranging from +5°C to +40°C; it must not be required to cross permanent obstacles or pits. Operation on slopes is prohibited. During operation, the load must be positioned approximately at the load center of the stacker.
- 5.Carrying or lifting personnel is strictly prohibited. When transporting goods, the load must be lowered to the lifting point (<300mm).
- 6.Do not use the truck on loading ramps or dock plates.
- 7.The rated load is indicated on the load chart and the nameplate. Operators must
- 8.observe these warning signs and safety instructions.
- 9.Operating illumination must be at least 50 lux.

Modifications

Any modifications or alterations that may affect the rated load, stability, or safe operation of the vehicle must obtain prior written approval from the original vehicle manufacturer, its authorized producer, or its successor. This includes changes affecting braking, steering, visibility, and the addition of movable attachments. Once the manufacturer or its successor approves a modification or alteration, the load charts, labels, identification marks, and operation and maintenance manuals must be updated accordingly.

Damage to the vehicle resulting from failure to follow these instructions will void the warranty.

2. Vehicle Overview

a. Main Components Overview

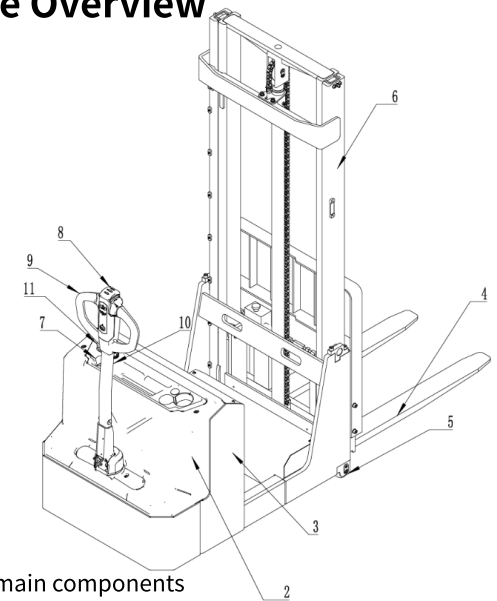
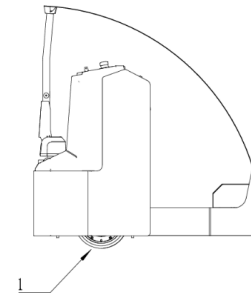


Diagram 1: main components

1	Drive Wheel	7	Charging Spring Cable
2	Cover Assembly	8	Belly Switch (Safety Reverse Switch)
3	Body / Main Frame	9	Multi-function Handle
4	Fork truck	10	Key
5	Load Wheels	11	E-Stop Switch
6	Mast	12	/

b.Main Technical Data

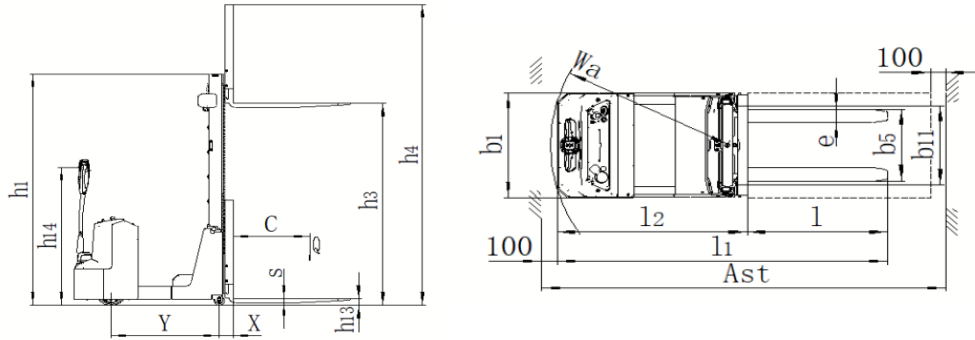


Fig. 2: Technical Parameters

根据 VDI 2198 标准的工业车辆类型表

特性	1.1 Mode	/	HSWS1501
	1.2 Power source(electric, diesel, LPG, electrical)	/	电动
	1.3 Driving methods (walking, standing, seated, picking)	/	步驾式
	1.4 Rated load carrying capacity	Q(kg)	600
	1.5 Load center distance	C(mm)	500
	1.6 Front overhang	X(mm)	110
	1.7 Wheelbase	Y(mm)	865
重量	2.1 Weight (including battery)	kg	1175
	2.2 Fully loaded, the axle load is applied to the drive wheel side/load-bearing wheel side.	kg	300/1474
	2.3 Unloaded axle load on drive wheel side/load-bearing wheel side	kg	740/435
车轮	3.1 tire	/	PU (polyurethane wheels)
	3.2 Front wheel size	Φ x w (mm)	Φ 230x75
	3.3 Rear wheel size	Φ x w (mm)	Φ 84x70
	3.4 Stabilizer wheel (size)	Φ x w (mm)	/
	3.5 Number of wheels (front/rear)	/	1x / 4
	3.6 Wheelbase (front)	b10(mm)	/
	3.7 Wheelbase (Rear)	b11(mm)	600
尺寸	4.1 Gauge height when retracted	h1 (mm)	2110
	4.2 Free height gain	h2 (mm)	/
	4.3 Lift height	h3 (mm)	3200
	4.4 Maximum height of gantry during operation	h4 (mm)	4100
	4.5 Handle height at minimum/maximum drive position	h14mm	750/1200
	4.6 Fork lowering height	h13mm	80
	4.7 Overall length	l1(mm)	2165
	4.8 Body length	l2(mm)	1245
	4.9 overall width	b1(mm)	790
	4.10 Fork size	s/ e/ l(mm)	35/100/960

尺寸	4.11 Distance between fork arms	b5 (mm)	220-710
	4.12 Minimum ground clearance	m2(mm)	50
	4.13 The aisle width is 1000*1200 mm	Ast (mm)	2630
	4.14 The aisle width is 800*1200 mm	Ast (mm)	2740
	4.15 Turning radius	Wa (mm)	1175
性能	5.1 Driving speed: Full load/Unloaded	km/h	3.9/4.3
	5.2 Speed increase (full load/no load)	m/s	0.1/0.137
	5.3 Descent speed full load/no load	m/s	0.13/0.13
	5.4 Maximum climbing ability (full load/no load)	%	5/8
	5.5 Driving brake	/	Electromagnetic brake
电机	6.1 Drive motor power	kW	0.75
	6.2 Increase motor power S3 7.5%	kW	2.2
	6.3 battery based on DIN 43531/ 35/ 36A, B, C standard	/	No
	6.4 Battery voltage, rated capacity K5	V/Ah	2x12/114-10hr
	6.5 Battery weight	kg	2x35
	6.6 energy consumption, base on VDI recycle standard	kWh/h	/
其他	7.1 Drive control method	/	DC speed control
	7.2 Driver's ear noise level	db(A)	≤75

Mast Type		Specification Model h1(mm)	Free elevation height h2(mm)	Maximum Mast Height During Operation h4 (mm)	Maximum fork lifting height h3 (mm)
Single Mast	1600	1980	1508	1985	1600
	2000	2380	1908	2385	2000
Double Mast	2600	1782	78	3039	2600
	2900	1932	78	3339	2900
	3200	2082	78	3639	3200
	3600	2282	78	4039	3600

c. Safety Devices and Warning Labels Description

- A Warning label: Do not stand under the forks or on the forks.
- B Load curve diagram label
- C Lifting hook label
- D Oil-filling label
- E Nameplate
- F Label
- G "No Riding" label
- H Label for reading and observing the instructions
- I No reaching with arms label

This stacker is equipped with an emergency stop switch 11 (Fig. 1), which can stop all lifting, lowering, and travel functions and disable the electromagnetic brake. After checking the controller functions, pull up this switch to operate the stacker. Before operation, insert key 10 (Fig. 1) and turn the switch clockwise. When the stacker is not in use, turn the key counterclockwise and remove it to prevent unauthorized use. This stacker is equipped with a belly switch 8 (Fig. 1). When the vehicle is traveling toward the operator, pressing the belly switch within the handle operating range will cause the vehicle to travel away from the operator. Also follow the instructions shown on the labels. Replace any damaged or missing labels promptly.

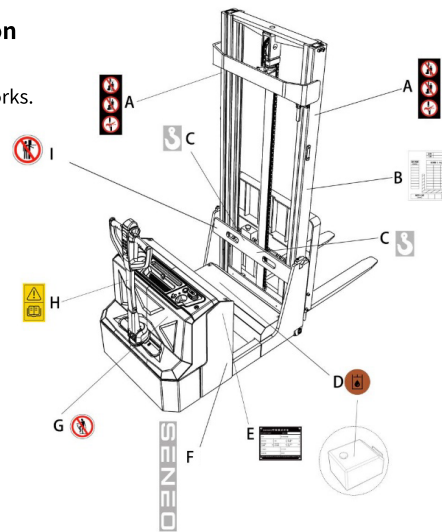


Figure 3: Safety devices and warning signs

d. Serial Number Location

VIN is located on the vehicle's hull.

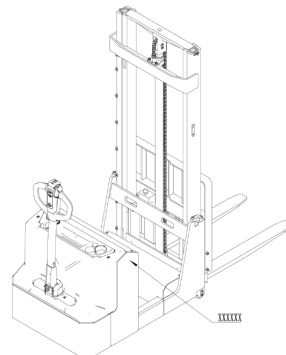


Fig. 4: Serial Number Location

e. 铭牌

The nameplate is located on the left or right side of the vehicle body.

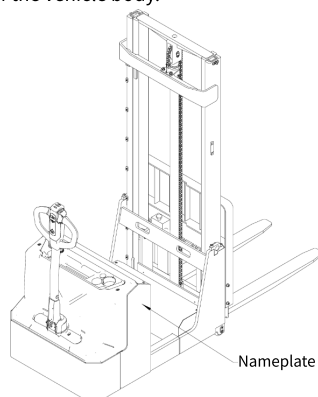


Figure 5 : Nameplate location

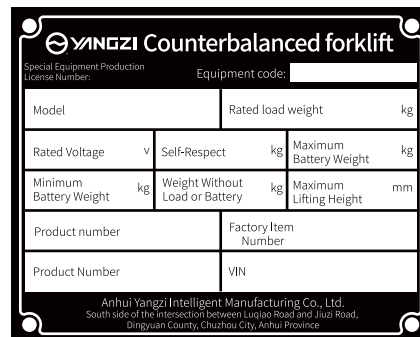


Figure 6: Nameplate (Subject to the actual posting)

3. Warnings, Residual Risks and Safety Instructions

⚠ Do not

- When driving outdoors, the stacking operation shall lift the load above the lifting point (<300mm).
- Place feet or hands under or into the lifting mechanism.
- Allow non-operators to stand in front of or behind the stacker when the vehicle is driving or lifting/lowering.
- Overload.
- Place feet at the front of the wheels, which may cause injury.
- Lift personnel. Personnel may fall and cause serious injury.
- Push or pull the load.
- Use this vehicle on a slope.
- Side load or tail load. The load must be evenly distributed on the forks.
- Use this vehicle to load unstable and unbalanced goods.
- Use it without the manufacturer's operation manual.
- Provide alternating current voltage other than 110V or 220V required by the on-board charger.

Observe different ground conditions when driving. The load may fall or the vehicle may lose control. Check the load condition from time to time. If the load becomes unstable, stop operating the vehicle immediately. When the load slides on the vehicle or off the body, brake the vehicle immediately and press the emergency stop switch. If any fault occurs to the stacker, please refer to Chapter 6.

Perform maintenance work according to regular inspection. This stacker is not waterproof. Please use it in a dry environment. Long-term continuous operation may damage the battery assembly. Stop operation when the hydraulic oil temperature is too high.

⚠ precautions

- When operating this stacker, the operator shall wear safety shoes.
- This vehicle is suitable for indoor use at room temperature between +5°C and +40°C.
- The operation lighting must be at least 50Lux.
- It is forbidden to operate the vehicle on a slope.
- Strictly prevent the vehicle body from unexpected sudden movement when not operating the vehicle (e.g., caused by others, etc.), and turn off the vehicle power when not operating.

4. Test Run, Transportation, Shutdown

a. Test Run

Table 2: Test Run Data

Model	HBWS0601/3200
Packing weight [kg]	1175
Lift height [mm]	3200

After receiving our new stacker or when re-commissioning is required, please perform the following steps before (first) operating the vehicle:

Check whether all parts are included and undamaged.

- Final installation and charging of the battery (refer to Chapter 7).
- Work according to the daily inspection and machine function inspection.

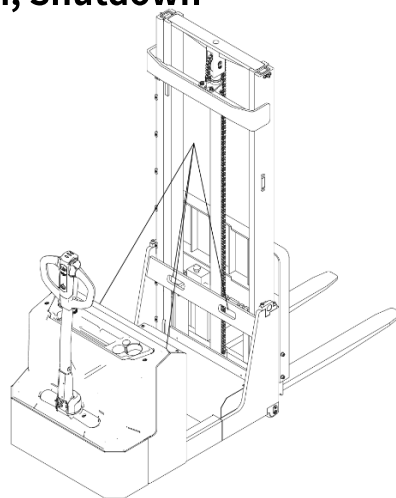


Figure 7: Lifting and Transporting with Crane

b. Lifting/ Transportation

When transporting, remove the load, lower the forks to the lowest position, and safely fix the vehicle with special lifting equipment according to Figure 7.

⚠ Lifting

Use designated crane and lifting equipment.
Do not stand under the suspended load.
Do not enter the danger zone during lifting.

Park the vehicle safely and tie the vehicle body at the points shown in Figure 8. Lift the vehicle to its destination and place the vehicle safely before removing the lifting equipment.

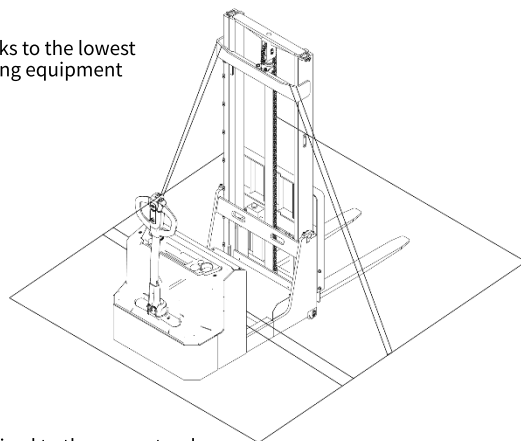


图 8: 固定点

Transportation

During transportation, the vehicle must be firmly fixed to the van or truck.

⚠ Lifting

Lower the forks and park the vehicle safely. According to Figure 8, fix it to the mast and body of each vehicle with special lifting straps, and fix the other side to the transport truck.

C. Storage/ Shutdown

When storing, remove the load, lower the vehicle to the lowest position, apply grease to all lubrication points mentioned in this manual (regular inspection), and strictly prevent the vehicle from rust and dust accumulation. Remove the battery and check the safety equipment to ensure that the vehicle is not squeezed after storage.

When the vehicle is finally shut down, hand it over to the designated recycling company. According to regulations, oil, batteries and electrical components must be recycled.

5. Daily Inspection

This chapter describes the pre-operation inspection required before operating the vehicle.

Daily inspection can effectively identify any faults or malfunctions of this vehicle. The following key points should be checked before operation.

⚠ Move the load away from the vehicle body and lower the forks. If any fault is found, please stop using this vehicle.

- Check for scratches, deformation, or cracks.
- Check for oil leaks in the hydraulic cylinders.
- Check the vehicle's longitudinal movement.
- Check the chain and rollers for damage or corrosion.
- Check if the wheels move smoothly.
- Press the emergency stop button to check the emergency braking function.
- Check the braking function of the lever switch.
- Press the button to check the lifting and lowering functions.
- Check the safety guard for damage and proper installation.
- Check the horn.
- Check that all bolts and nuts are tightened.
- Check the key switch function.
- Check the speed limit switch.

6. Operating Instructions

Before operating this vehicle, please follow the warnings and safety instructions (see Chapter 2).

Before operating this vehicle, ensure that the cargo or other equipment will not impair visibility!

Ensure that the cargo is level and stable, and perform a routine check. To begin, insert the key and turn it clockwise to the "on" position. The key can only be used on walk-controlled electric stackers. Before that, carefully pull out the emergency stop button. Press the horn button 21 (Figure 9) to activate the horn.

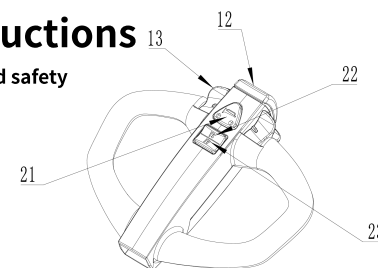


Figure 9: Handle Operation Control

a. Parking

⚠ Do not park on an incline.

This vehicle is equipped with an electromagnetic fault-protected parking and parking brake.

Always fully lower the forks and move the vehicle to a safe area. Then turn the key counterclockwise to the "Off" position and remove the key.

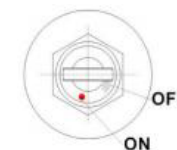


Figure 10: Key Switch

b. Load Curve

The curve shows the maximum load capacity Q [kg] for a given load center c [mm] and a corresponding lifting height H [mm] with a horizontal load. For example: a cargo with a center of gravity distance c of 500mm and a maximum lifting height H of 3600mm, at the highest height, the maximum load capacity Q is 800kg.

型号 HBWS-0601	
门架 3200	
起升高度 (mm)	起重量 Q (kg)
3200	600 500
载荷中心距 (mm)	500 600

Figure 11: Load curve

c. Lifting

- ⚠ Do not overload. The maximum load capacity of this vehicle is 600kg at a load center of 500mm.**
Only lift to the load capacity allowed by the load curve.

While driving, lower the forks fully to the legs and press the lifting button (Figure 9, 22) until it reaches your desired lifting height.

d. Lowering

If the forks are on the rack, carefully remove the vehicle from the rack, either with the pallet or separately.

Then carefully press the lowering button (Figure 9, 23) to lower the load until the forks leave the pallet, then drive the vehicle away from the load.

e. Driving

- ⚠ Driving on an incline is permitted only when the cargo is facing upwards. As shown in Figure 12. Do not drive on an incline at speeds exceeding the specified technical parameters. Please drive at a limited speed when the forks are raised to the lifting point (>300mm).**

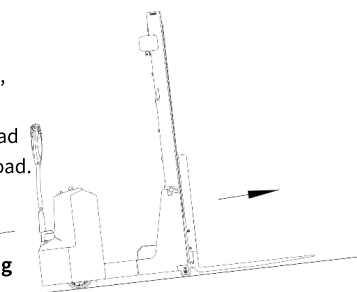


Figure 12: Cargo facing upwards

Turn the inserted key to the "On" position (Figure 10; then pull out the emergency stop button) to start the vehicle, and move the handle to the operating area ('F', Figure 13). Turn the accelerator button to the desired forward direction 'Fw' or reverse direction 'Bw' (Figure 13). Control the driving speed by carefully moving the accelerator button (13, Figure 9) until the desired speed is reached.

If you move the accelerator button back to the center position, the controller will decelerate the vehicle until it stops.

If the vehicle stops, the parking brake will engage.

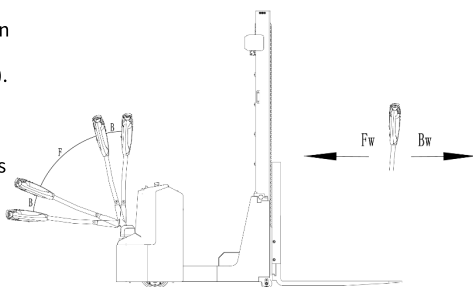


Figure 13: Operating direction

Carefully drive the vehicle to your destination. Observe the road conditions and adjust the driving speed using the accelerator button.

f. Steering

The vehicle is steered by moving the handle left or right.

g. Braking

- ⚠ Braking performance depends on road conditions and vehicle load. The braking function can be activated in the following ways (Figures 9 and 13):**
- Regenerative braking is activated by moving the accelerator button (Figures 9 and 13) back to the '0' position or releasing the button. The vehicle brakes until it stops.
 - Regenerative braking is activated by moving the accelerator button (Figures 9 and 13) directly from one direction of travel to the opposite direction until it begins to move in the opposite direction.
 - The vehicle brakes when the handle is moved up or down to the braking zone ('B'). If the handle is released, it automatically moves up to the upper braking zone ('B'). The vehicle begins to brake until it stops.
 - The belly switch (Figures 9 and 12) prevents the operator from being squeezed. If this switch is pressed, the vehicle begins to decelerate and/or begins to move in the opposite direction a short distance ('Bw.') before stopping. Consider this switch as an option to operate the vehicle if the handle is in the operating area and the vehicle is not moving.

h. Malfunction

If the vehicle malfunctions or becomes inoperable, stop using the vehicle and press the emergency stop switch 11 (Figure 1). If possible, park the vehicle in a safe area, turn the key switch 10 (Figure 1) counter-clockwise, and then remove the key.

Immediately notify the manager and/or contact your after-sales service personnel. If necessary, use professional lifting equipment to tow the vehicle away from the operating area.

i. Emergency Situation

In an emergency or when the vehicle is at risk of tipping over, maintain a safe distance. If possible, press the emergency stop switch (6), which will immediately stop all electrical functions.

7. Battery Charging and Replacement

- ⚠**
- Only qualified personnel may perform repairs or charge the battery. Please strictly adhere to this user manual and the battery manufacturer's instructions.
 - These batteries are maintenance-free; refilling is prohibited.
 - Battery recycling must comply with national regulations. Please follow these regulations.
 - Do not use open flames when handling batteries; gases may cause an explosion!
 - Flammable materials or liquids must not be stored in the battery charging area. Smoking is prohibited, and this area must be well-ventilated.
 - Park the vehicle safely before starting charging or installing/replacing the battery.
 - Before completing maintenance work, ensure all wiring harness connections are correct and do not interfere with other components of the vehicle.

For lead-acid models, this vehicle is equipped with the following sealed lead-acid batteries:

- 2 pcs of 12V/114Ah 10hr

- ⚠ The weight of the battery can affect vehicle handling.**

Please take into account the battery's maximum operating temperature.

a. Replacement

Park the vehicle safely, close the stacker truck with the key (Figure 1, 10) and press the emergency stop switch (Figure 1, 11). Unscrew the two screws on the main cover and remove the main outer cover. Unscrew the screws on the negative terminals of both batteries (displayed as '-'), then unscrew the screws on the positive terminals (displayed as '+'), and place the wiring harness aside. Loosen and remove the battery cover. When removing the battery, be careful not to touch the upper electrical dashboard or the side fuel tank. Remove the second battery from the bottom in the same way (lead-acid only). The installation method is the reverse of the removal method. Connect the positive terminal of the battery first. Otherwise, the vehicle be damaged.

- ② Two lead-acid batteries

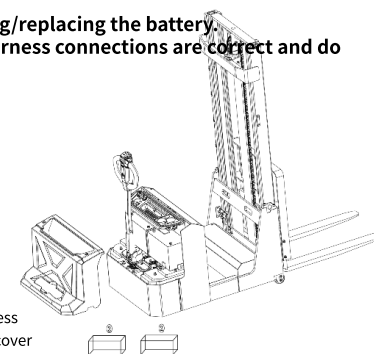


Figure 14: Battery replace

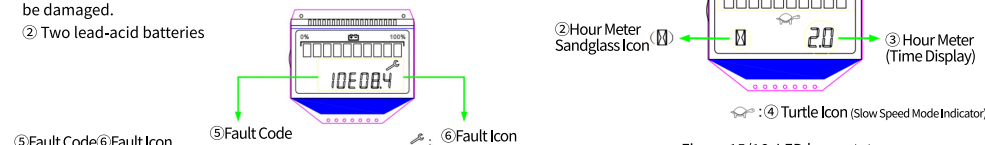


Figure 15/16: LED lamp status

The rightmost LED illuminates only when the battery is properly charged and reaches the reset voltage. As the battery's state of charge decreases, the LEDs light up sequentially, but only one at a time. It features a power-off memory function.

- ①: Battery level display. Each bar represents 10% of the battery level. The lowest displayed bar is one. The battery level bars will flash when the battery is low.
- ②: Hourly timer. A flashing funnel indicates the handle is timing. It flashes by default when the handle receives a message and displays the time.
- ③: Hourly timer. The unit is hours, with a maximum display of 99999.9 hours.

④: Mode Status Icon

When this icon is illuminated, Handle Mode is activated. When the icon is off, Handle Mode is deactivated. The default method for switching Handle Mode status is a short press of the Turtle Button.

⑤: Fault Display

When a fault occurs, the fault information will occupy the hour meter display area and alternate with the hour meter display. Different fault prefixes indicate different fault categories.

For detailed fault protocols and definitions, please refer to the Fault Code Description section.

⑥: Fault Indicator Icon

This icon will illuminate when a fault is detected.

c. Charging

- This vehicle uses an external charger only. The use of any non-approved charger is prohibited.
- Before operating the charger, thoroughly read and understand the charger instruction manual.
- Ensure the charging area is well ventilated.
- Accurate charging status can only be checked via the discharge indicator. To verify the charging status, charging must be interrupted and the vehicle powered on.

Park the vehicle in a designated safe area equipped with a dedicated power supply.

Lower the forks and remove the load.

Switch off the vehicle power and connect the external charger to the charging port on the truck body (Fig. 7).

The charger will begin charging the battery automatically.

A flashing red indicator on the external charger indicates charging in progress. A steady green indicator indicates charging completed.

The LED indicator functions are shown in the table below:

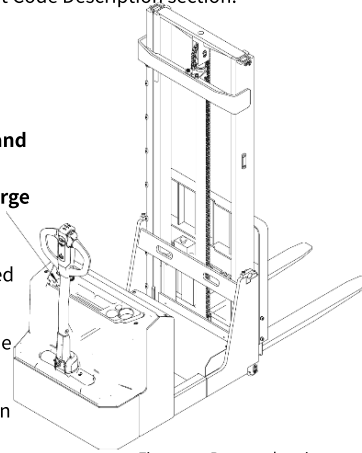


Figure17: Battery charging

Table 3: LED Indicator Status

LED Indicator	Function
Flashing Red	Battery charging in progress
Steady Green	Battery fully charged
Alternating Yellow and Green	Invalid connection or fault condition

After charging is completed, disconnect the plug from the power outlet and return the spiral cable to the truck body.

8.Periodic Maintenance

- ▲● Maintenance work on this truck must only be carried out by qualified and trained personnel.
- ▲● Before maintenance, remove all loads from the forks and lower the forks to the lowest position.
- ▲● If the truck must be lifted, use the specified lifting or securing equipment as described in Chapter 4. Before operation, place safety devices (such as designated jacks, wedges, or wooden blocks) beneath the truck to prevent accidental lowering, movement, or slipping.
- ▲● Pay special attention when servicing the tiller handle assembly. The gas spring is preloaded. Careless handling may result in injury.
- ▲● Use only approved original spare parts supplied by your authorized dealer.
- ▲● Hydraulic oil leakage may cause equipment malfunction and accidents.
- ▲● Pressure valve adjustment must only be performed by trained service technicians.
- ▲● If wheel replacement is required, follow the above instructions carefully. The wheels and casters must remain round and free from abnormal wear. Inspect all items listed in the maintenance checklist.

a.Maintenance checklist

Hydraulic system		Interval (months)			
		1	3	6	12
1	Check the hydraulic cylinders and pistons for damage, noise, and leaks.		●		
2	Check hydraulic connections and oil lines for damage and leaks.		●		
3	Check the hydraulic oil level and refill if necessary.		●		
4	Refill with hydraulic oil (for 12 months or 1500 working hours).				●
5	Check and adjust the function of the pressure valve (1500 kg +0/ +10%).				●
Mechanical system					
6	Check the forks for deformation and cracks.		●		
7	Check the chassis for deformation and cracks.		●		
8	Check that all screws are fully tightened.		●		
9	Inspect the gantry and chain for corrosion, deformation, or damage	●			
10	Check the gearbox for noise and leaks.		●		
11	Check the wheels for deformation and damage, and replace them if necessary.		●		
12	Lubricate steering bearings				●
13	Check and lubricate the spindle center point		●		
14	Grease nipple	●			
15	Replace any damaged protective and/or protective panels.	●			
Electrical system			●		
16	Check if the wires are damaged.		●		
17	Check the condition of electrical connectors and terminals.		●		
18	Test the emergency stop switch function		●		
19	Check the electric drive motor for noise and damage.		●		
20	Test display		●		
21	Check that the correct fuse is being used and replace it if necessary.		●		
22	Detect speaker		●		
23	Check the pump contactor		●		
24	Check the frame for leaks (insulation test).		●		
25	Check the controller's operating functions.		●		
26	Check if the drive motor is damaged.		●		
Braking system			●		
27	Check braking; replace brake discs or adjust clearance if necessary.		●		
Battery					
28	Check battery voltage		●		
29	Clean and grease the terminals, and check for corrosion and damage.		●		
30	Check if the battery casing is damaged.		●		
Charger					
31	Check if the main power cord is damaged.				●
32	Check the startup protection program during charging.				●
Function		●			
33	Detect speaker	●			
34	Check the air gap of the electromagnetic brake.	●			
35	Test emergency braking function	●			
36	Detect reverse braking and regenerative braking functions	●			
37	Detecting the belly switch function	●			
38	Check steering function	●			
39	Check the boost and descent functions	●			
40	Check the lever switch function	●			
41	Check the key switch for damage and functionality.	●			
42	Speed limit switch for detection (lifting height >=300mm)	●			
Comprehensive					
43	Check that all labels are clear and intact.	●			
44	Check that the protective panels and/or guards are not damaged.	●			
45	Inspect the steering wheels; if worn, adjust the height or replace them.		●		
46	Conduct a trial run	●			

b. Lubrication Points

Lubricate the marked points indicated in the maintenance checklist.

Required grease specification: DIN 51825 standard grease.

- 1.Load wheel bearings
- 2.Chains
- 3.Mast
- 4.Steering bearings
- 5.Gearbox

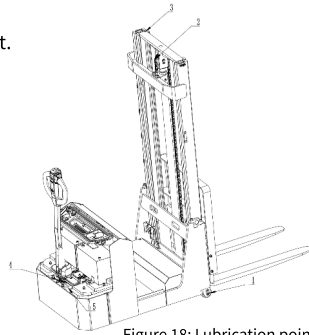


Figure 18: Lubrication points

c. Inspection and Hydraulic Oil Refill

The required hydraulic oil type is:

Ambient Temperature	-5°C~25°C	>25°C
Oil Grade	L-HM- 32, DIN 51524	L-HM- 46, DIN 51524
Viscosity	28.8-35.2	41.4 - 47
Oil Quantity	4L(fill according to actual vehicle model)	

Waste materials such as used oil, waste batteries, or other consumables must be disposed of and recycled in accordance with national regulations. If necessary, they shall be handed over to a certified recycling company for proper treatment.

d. Inspection of Electrical Fuse

Remove the main cover. The fuse is located in the position shown in Figure 19; specifications are listed in Table 5.

Table 5: Fuse Specification

	Rating
FU1	200A

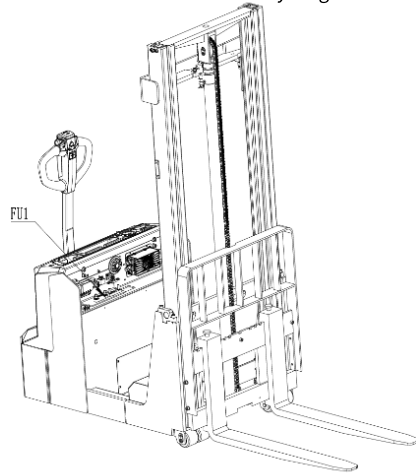


Figure 19: Fuse Location

e. Removal and Reinstallation of Protective Guard

▲ If the protective device is damaged or not properly installed, do not operate the vehicle.

If the protective guard needs to be removed, unscrew the fixing bolts and carefully take off the guard.

The screws remain attached to the unit.

For reinstallation, position the protective guard correctly and securely tighten each screw.

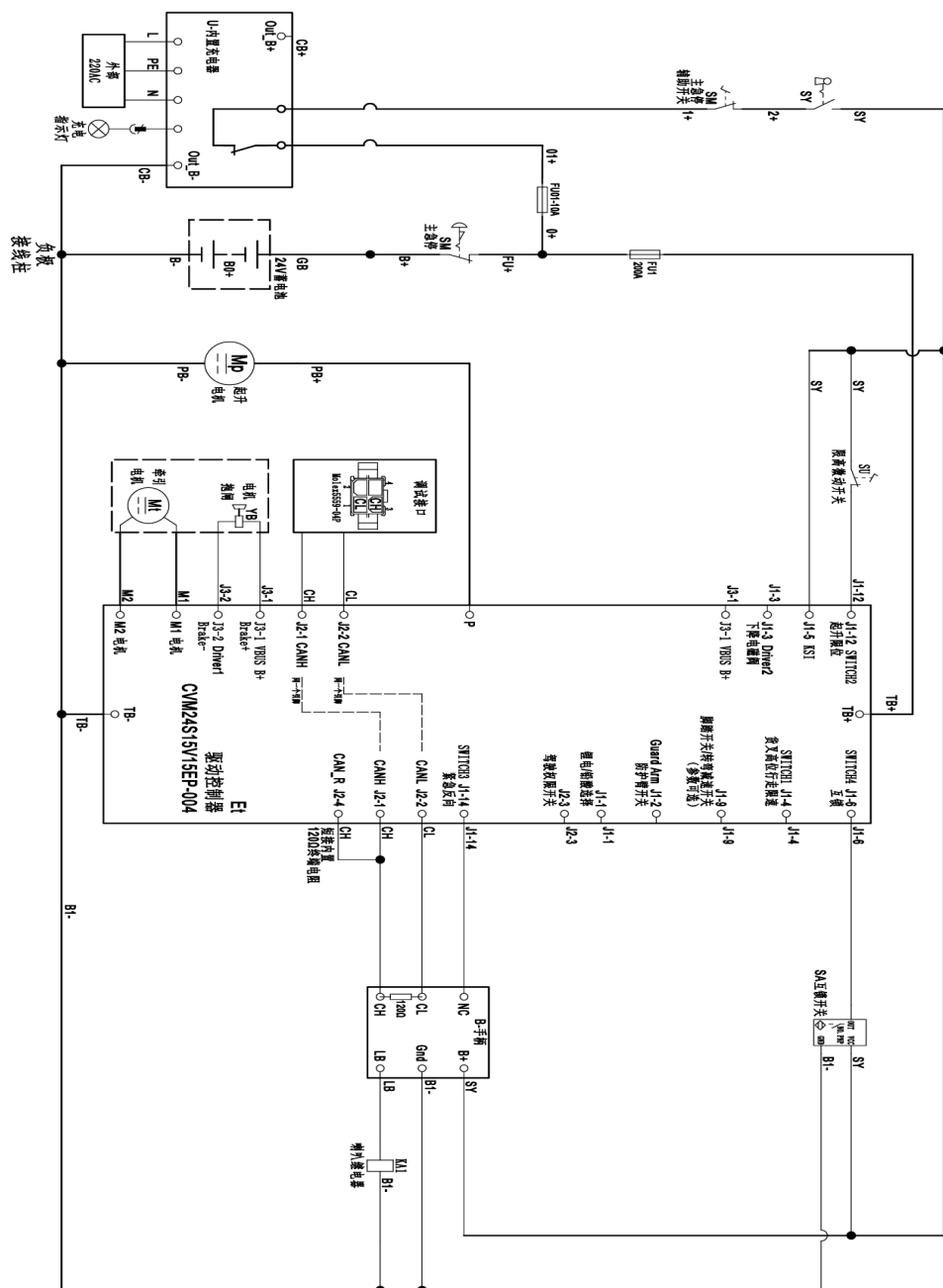
If replacement parts are required, please contact your nearest authorized service partner.

9.Troubleshooting Analysis

Fault	Reason	Repair
Goods cannot be lift	Weight too large	Only increase maximum load
	Battery discharge	battery charging
	booster fuse malfunctioned	Inspect and ultimately replace the booster fuse.
	Hydraulic oil level too low	Check and finally fill with hydraulic oil.
	oil leak	Inspect the sealing of the oil pipes and/or cylinders.
Can't absorb oil	Excessive oil content	Reduce oil quality
Goods cannot be dropped	Oil clogging control valve	Check the hydraulic fluid and clean the control valves.
	The descent solenoid valve is not open or is damaged.	Inspect or replace the descent solenoid valve
Forklift cannot be operated	Battery is charging	Fully charge the battery, then unplug the main power cord from the power outlet.
	Battery not connected	Connect the battery correctly
	Fuse malfunction	Inspect and eventually replace the fuse.
	Battery is low	battery charging
	Power is not on.	Check emergency stop, key, and other switch components.
	The operation sequence was incorrect.	First, move the handle to the braking area, then return the handle to the operating area, and then operate the accelerator.
Vehicles travel in only one direction	Accelerator and connector damaged	Inspect the accelerator and connectors
The forklift moves very slowly	Battery is low	Check the battery status on the discharge indicator.
	Electromagnetic brake has been activated.	Check the electromagnetic brake
	The relevant handle wiring harness is not connected or is damaged.	Check the handle wiring harness and connectors
Forklift suddenly started.	Controller damaged	Replace controller
	The accelerator did not move back to its intermediate position.	Repair or replace the accelerator

If the vehicle breaks down and cannot be operated outside the working area, jack it up, place a fixed support device under it to ensure safety, and then move the vehicle out of the aisle.

c.Braking system schematic diagram



User Notice :

—、Warranty Period:

1. The warranty period for warehouse forklifts is 12 months from the date of sale or 1000 hours of use, whichever comes first.
2. Parts covered by a 12-month or 1000-hour warranty include: frame, mast, motor, electronic control system, battery, charger assembly, accelerator, chain forks, gas springs, instruments, hydraulic cylinders, steering gear, multi-way valve, gear pump, and various bearings;
3. Parts covered by a 6-month or 500-hour warranty include: hoses, brakes, master cylinder, wheel cylinders, front wheel assembly, caster wheel assembly, drive wheel outer ring, horn, various seals, handlebar panel buttons, etc.
4. Components covered by a one-month or 200-hour warranty include: various sensors, various relays (starting, intermediate, safety, solenoid valves, etc.), various switches (brake, steering, reversing, lights), electronic regulators, and warning lights;
5. The above-mentioned malfunctions not caused by quality issues are not covered by warranty. The warranty period is whichever comes first.
6. For detailed warranty information, please consult Yangzi Forklift After-Sales Service Department or your local dealer.

II.Warranty Principles:

1. During the warranty period, routine maintenance of the machine must be performed.
2. Under normal use, if any parts have defects in material, manufacturing, or assembly, and are determined by Yangzi Forklift's professionals to be non-human-caused damage, the defective parts will be repaired or replaced free of charge.
3. Defects in forklifts may cause damage or downtime, reputational or economic losses (such as economic or moral, direct or indirect, anticipated, etc.) to users other than the machine itself. Yangzi Forklifts is only responsible for the repair and replacement of defective parts of the machine itself, and is not liable for compensation for losses other than those caused by the machine itself.

III. The following objects and situations are not covered by the warranty, even within the warranty period:

- 1.Losses or defects caused by accidents, improper driving, violations of regulations, negligence, or force majeure events such as overloading.

2. Defects and losses caused by unauthorized additions or modifications to the machine, alterations to the machine's structure or purpose, or impacts on the machine's performance and stability, without the consent of relevant personnel from Yangzi Forklift.
3. Unauthorized disassembly or intentional damage to the timer's operation will be handled as if the vehicle's warranty has expired.
4. Failure to stop and troubleshoot the machine when it malfunctions, resulting in losses due to operation while faulty, or losses artificially amplified by the operator.
5. Unauthorized adjustment, disassembly, or repair of system pressure settings or machine components, or incomplete parts, missing nameplates, etc., making it impossible to identify the cause of the malfunction and the responsible party.
6. Failure to perform routine maintenance on the machine, resulting in malfunctions.
7. Malfunctions caused by using substandard or unsuitable fuels for the local climate and temperature.
8. Faults where responsibility cannot be determined due to the loss of faulty parts.
9. Electrical components such as plugs, sockets, light bulbs (including combination lights), fuses, motor carbon brushes, and other easily damaged parts are not covered by the warranty.

Forklift Warranty Regulations

category	Warranty coverage	Warranty period
Complete machine	Motors: (walking motors, lift motors, gearboxes, etc.) Electrical components: (accelerators, controllers, chargers, batteries, etc.) Hydraulic components: (cylinders, pumps, chains, etc.) Structural components: (frames, forks, steering systems, etc.)	12 months
Consumable parts	Bearings, shafts, key switches, emergency stop switches, rollers, instruments, combination switches	6 months
Consumables	Plastic parts, brake pads, tires, light bulbs, fuse boxes, springs, paint, etc.	No warranty

END